calculating SWAT sediment, nutrients at outlet

Posted by azoller - 2009/07/22 19:15

I am interested in calculating cumulative sediment, TP and TN at my watershed outlet. I saw in a previous Kineros posting, that you recommended looking at the sediment and nutrients in the channel at the outlet.

For SWAT, what is the name of the output channel file that contains sediment and nutrient info, and is this located in the simulation folder? Thanks. Amy.

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Re:calculating SWAT sediment, nutrients at outlet

Posted by lainie - 2009/07/24 22:09

The summary data for the watershed for each SWAT simulation year is found in the output.std file, located in the simulations directory in the subfolder for your simulation.

This file (a text file) can be opened with WordPad or a similar program.

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Re:calculating SWAT sediment, nutrients at outlet

Posted by azoller - 2009/07/24 23:10

Thanks, Lanie.

I have been studying the output.std file. It appears that these outputs are from the subbasins (HRU), or what the subbasin contributes to the stream (right?).

Prior to your reply, I thought I should be using the value that expresses the channel load at the watershed outlet. So I looked at the SedYld_mtns/yr attribute of the streams shapefile for the channel segment that truncates at the outlet. But this number was real small (240.6 mtons/yr) compared to the numbers shown in the output.std file (1.7 tonne/Ha *4000 Ha = about 6800 tonnes/yr). So, I guess I'm not real sure what those stream values represent.

And, I couldn't figure out how to join the nutrient information with streams. I did notice the hyd.out file, but this didn't appear to have a subbasin attribute, so I couldn't join it to the streams shapefile to add nutrient info. Is there a way to find nutrient content of the flowing water?

At any rate, I'm happy to have found the values shown in the output.std file, and these make sense compared with my real data (except the SWAT Nitrogen was rather high), and thank you for your reply!

Amy

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